

Comparisons of Job Characteristics

Focus Occupation: Structural Iron and Steel Workers (47-2221)

Associated Occupation: Sheet Metal Workers (47-2211)

[Compare Knowledge](#)

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| | |
|----|--|
| << | Focus occupation element is much lower |
| < | Focus occupation element is lower |
| 0 | Focus occupation element is at a similar level |
| > | Focus occupation element is at a higher level |
| >> | Focus occupation element is at a much higher level |

Knowledge

Similarity of Focus Occupation to Associated Occupation: 90

Focus Occupation: Structural Iron and Steel Workers (47-2221)

Associated Occupation: Sheet Metal Workers (47-2211)

| Associated Occupation's Key Knowledge Elements | Average Rating, All Occupations | Associated Occupation's Rating | Focus Occupation's Rating | Evaluation of Focus Occupation |
|--|---------------------------------|--------------------------------|---------------------------|--|
| Mechanical | 6.8 | 17.4 | 13.5 | << Extensive education and/or training may be required |
| Building and Construction | 4.0 | 16.5 | 18.3 | > Current knowledge level is likely sufficient |
| Design | 5.2 | 14.9 | 11.2 | << Extensive education and/or training may be required |
| Mathematics | 9.2 | 14.8 | 12.5 | < Expanded education and/or training may be required |
| Engineering and Technology | 5.7 | 13.5 | 11.5 | < Expanded education and/or training may be required |
| Administration and Management | 8.4 | 11.7 | 6.4 | << Extensive education and/or training may be required |
| Production and Processing | 6.0 | 11.0 | 13.2 | > Current knowledge level is likely sufficient |

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 73

Focus Occupation: Structural Iron and Steel Workers (47-2221)

Associated Occupation: Sheet Metal Workers (47-2211)

| Associated Occupation's Key Skills Elements | Average Rating, All Occupations | Associated Occupation's Rating | Focus Occupation's Rating | Evaluation of Focus Occupation |
|---|---------------------------------|--------------------------------|---------------------------|---|
| Mathematics | 6.2 | 9.4 | 5.8 | << Extensive development of skills in this area may be required |
| Equipment Maintenance | 3.5 | 7.4 | 5.7 | < A higher skill level may be required |
| Repairing | 3.4 | 6.9 | 6.2 | < A higher skill level may be required |
| Equipment Selection | 3.3 | 6.4 | 6.1 | 0 Current skill level may be sufficient |

| | | | | | |
|--------------|-----|-----|-----|----|--|
| Installation | 1.7 | 4.4 | 2.5 | << | Extensive development of skills in this area may be required |
|--------------|-----|-----|-----|----|--|

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

| Abilities | Similarity of Focus Occupation to Associated Occupation: 68 |
|-----------|---|
|-----------|---|

Focus Occupation: Structural Iron and Steel Workers (47-2221)

Associated Occupation: Sheet Metal Workers (47-2211)

| Associated Occupation's Key Abilities Elements | Average Rating, All Occupations | Associated Occupation's Rating | Focus Occupation's Rating | Evaluation of Focus Occupation | |
|--|---------------------------------|--------------------------------|---------------------------|--------------------------------|--|
| Visualization | 7.5 | 12.3 | 12.3 | 0 | Current ability level may be sufficient |
| Selective Attention | 8.7 | 10.6 | 11.0 | 0 | Current ability level may be sufficient |
| Static Strength | 5.0 | 10.0 | 16.6 | >> | Current ability level is likely more than sufficient |
| Depth Perception | 5.3 | 9.5 | 13.3 | >> | Current ability level is likely more than sufficient |
| Auditory Attention | 5.9 | 9.1 | 11.6 | > | Current ability level is likely sufficient |
| Gross Body Equilibrium | 3.2 | 7.3 | 13.0 | >> | Current ability level is likely more than sufficient |
| Speed of Limb Movement | 3.2 | 7.1 | 8.6 | > | Current ability level is likely sufficient |

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

| Activities that Both Occupations Have in Common | Similarity of Focus Occupation to Associated Occupation: 94 |
|---|---|
|---|---|

Focus Occupation: Structural Iron and Steel Workers (47-2221)

Associated Occupation: Sheet Metal Workers (47-2211)

| Work Activities | Exclusivity of Activity |
|--|-------------------------|
| Adhere to safety procedures | 12 |
| Build or repair structures in construction, repair, or manufacturing setting | 54 |
| Cut metal or plastic | 77 |
| Determine project methods and procedures | 76 |
| Erect scaffold | 56 |
| Fabricate, assemble, or disassemble manufactured products by hand | 11 |
| File, sand, grind, or polish metal or plastic objects | 82 |
| Identify base metals for welding | 68 |
| Identify properties of metals for repair or fabrication activities | 71 |
| Make independent judgment in assembly procedures | 64 |
| Move or fit heavy objects | 8 |
| Perform safety inspections in construction or resource extraction setting | 46 |
| Perform safety inspections in industrial, manufacturing or repair setting | 32 |
| Position, align, or level machines, equipment, or structures | 74 |

| | |
|--|----|
| Read blueprints | 10 |
| Recognize characteristics of alloys | 71 |
| Recognize characteristics of metals | 62 |
| Use acetylene welding/cutting torch | 54 |
| Use arc welding equipment | 62 |
| Use combination welding procedures | 68 |
| Use hand or power tools | 2 |
| Use measuring devices in construction or extraction work | 41 |
| Use precision measuring tools or equipment | 17 |
| Weld together metal parts, components, or structures | 54 |

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 86

Focus Occupation: Structural Iron and Steel Workers (47-2221)
Associated Occupation: Sheet Metal Workers (47-2211)

| Tools and Technologies | Exclusivity |
|--|-------------|
| Computers | 1 |
| Cutting and crimping and punching tools | 3 |
| Cutting tools | 18 |
| Face and head protection | 7 |
| Fastener setting tools | 12 |
| Forming tools | 2 |
| Hearing protectors | 12 |
| Holding and clamping tools | 3 |
| Industry specific software | 1 |
| Ladders and scaffolding | 6 |
| Lifting equipment and accessories | 3 |
| Marking tools | 11 |
| Measuring and layout tools | 3 |
| Pneumatic tools | 8 |
| Power tools | 2 |
| Rough and finishing tools | 5 |
| Safety apparel | 4 |
| Soldering and brazing and welding machinery and supplies | 6 |
| Special tooling fixtures | 16 |
| Vision protection and accessories | 3 |
| Wrenches and drivers | 2 |

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.